

REMARKS

Summary of Amendments to the Claims

1. Claim 1 has been amended to limit the hydroxy ester functional group to that corresponding to the hydroxy ester functional group of PinAc and PinMAc.
2. Claim 5 has been cancelled, since it is now redundant in view of amended Claim 1.
3. Claim 6 has been amended to limit the hydroxy ester functional group of the repeat unit to that corresponding to the hydroxy ester functional group of PinAc and PinMAc.
4. Claim 14 has been amended to incorporate the limitations of Claim 15 into the description of the ethylenically unsaturated compound which contains at least one fluorine atom covalently attached to an ethylenically unsaturated carbon atom (part c of Claim 14).
5. Claim 15 has been cancelled, since it is now redundant in view of amended Claim 14.
6. Claim 16 has been amended to refer to Claim 14, in view of the amendment to Claim 14 and the cancellation of Claim 15.
7. Claim 18 has been amended to limit the repeat unit (iii) derived from at least one ethylenically unsaturated compound which contains at least one fluorine atom covalently attached to an ethylenically unsaturated carbon atom to the more specific list of fluoro-olefins presented in original Claim 15.
8. Claim 24 has been amended to limit the hydroxy ester functional group to that corresponding to the hydroxy ester functional group of PinAc and PinMAc.
9. Claims 25 and 26 have been cancelled, and the subject matter incorporated into new Claims 31 and 32.
10. New Claim 27 has been added to specify a copolymer that contains at least three distinct repeat units.
11. New Claim 28 has been added for a photoresist that comprises a copolymer that contains at least three distinct repeat units and a photoactive component.
12. New Claim 29 has been added for a photoresist that comprises a photoactive component and a polymer functionalized with an hydroxy ester functional group and also contains a repeat unit derived from NB-F-OH.
13. New Claim 30 has been added for a photoresist that comprises a photoactive component and a repeat unit derived from certain ester-substituted olefins and a repeat unit derived from NB-F-OH.
14. New Claim 31 has been added to claim coated substrates.

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15. New Claim 32 has been added, in which the substrate of the coated substrates of new Claim 31 is more specifically defined.

16. New Claim 33 has been added, in which the limitations of original Claim 17 have been incorporated into original Claim 14.

None of these amendments add new matter.

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Response to Items in "Detailed Action"

The following comments are submitted in response to the items set forth in the "Detailed Action." Paragraph numbers refer to section numbers in the Office Action.

Claim Rejections – 35 USC § 103

3. Claims 1-4, 6, 9-12, and 24 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Nishimura et al (US 6,800,414 B2).

Applicants have amended Claims 1, 6, and 24 to limit the hydroxy ester functional group to

-CO₂-C(Me)₂-C(Me)₂-OH, which corresponds to the hydroxy ester functional group of PinAc and PinMAc. These amendments, in essence, incorporate the limitations of Claim 5 into Claims 1, 6 and 24. Since Claims 2-4 are directly or indirectly dependent on Claim 1, and Claims 9-12 are directly or indirectly dependent on Claim 6, these amendments also incorporate the limitations of Claim 5 into these dependent claims. Since the Examiner has noted that Claim 5 contains allowable subject matter, these amendments are believed to overcome this rejection.

4. Claims 1, 6, 7, 9, 14 and 18-26 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Sato et al (US 6,596,458 B1).

Applicants have cancelled Claims 25 and 26.

Applicants have amended Claims 1, 6 and 24 as described above, and these amendments are believed to overcome the rejection of Claims 1, 6, 7, 9, and 24 based on Sato et al., as well as those based on Nishimura et al.

Applicants have also amended Claims 14 and 18 to specify that the "ethylenically unsaturated compound which contains at least one fluorine atom covalently attached to an ethylenically unsaturated carbon atom" is selected from the group consisting of tetrafluoroethylene, chlorotrifluoroethylene, hexafluoropropylene, trifluoroethylene, vinylidene fluoride, vinyl fluoride, perfluoro-(2,2-dimethyl-1,3-dioxole), perfluoro-(2-methylene-4-methyl-1,3-dioxolane, CF₂=CFO(CF₂)_tCF=CF₂, where t is 1 or 2, and R_f'OCF=CF₂, wherein R_f' is a

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saturated fluoroalkyl group of from 1 to about 10 carbon atoms. These amendments, in essence, incorporate the limitations of Claim 15 into Claims 14 and 18. Since Claims 19-23 are directly or indirectly dependent on Claim 18, these amendments also incorporate the limitations of Claim 15 into these dependent claims. Since the Examiner has noted that Claim 15 contains allowable subject matter, these amendments are believed to overcome the rejection of Claims 14 and 18-23.

5. Claims 1, 6-8, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yabuuchi (US 5,945,267).

Applicants maintain that it is inappropriate to use this reference as the basis for a rejection. Applicants have pointed out, and the Examiner has agreed, that the specific portion of this reference relied on by the Examiner as the basis for rejection contains an error. In order to sustain the rejection, the Examiner must assume that the Examiner knows what Yabuuchi intended to teach. It is not enough that the probability be greater than, e.g., 50%, that the Examiner is guessing correctly. The Examiner's "belief" should not be substituted for what is stated in black-and-white in the prior art. Absent the teaching of the instant Application (Ser. No. 10/669,492), the Examiner would have had little reason to correct the teaching of Yabuuchi et al to include 1,1-dimethyl-3-hydroxybutyl)methacrylate in the list of ethylenic unsaturated compounds in US 5,945,267. A reference should be used only for what it teaches, and this reference does not teach that 1,1-dimethyl-3-hydroxybutyl)methacrylate is an appropriate monomer to use in preparing either "photographic light sensitive materials" or the photoresists of the Applicants' invention.

But this is a moot point since Applicants' amendments to Claims 1 and 6 described above in Section 3 are believed to overcome the rejection of Claims 1, 6-8 and 11 based on this reference of Yabuuchi et al.

Allowable Subject Matter

6. Applicants thank the Examiner for her guidance on allowable subject matter. Claims 1, 6, 14, 18 and 24 have been amended to incorporate the limitations of allowable claims 5 or 15.

New Claims

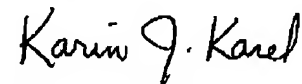
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New claims 27-33 have been added. No new matter has been added with these claims. Claims 27 and 28, which specify that there are at least three distinct repeat units in the copolymer, are supported at least by Examples 3 – 9. Claims 29 and 30 are similar to original claims 1 and 6, but incorporate the further limitation of allowable claim 13. Similarly, Claim 33 corresponds to original claim 14 but incorporates the further limitation of allowable claim 17. Claims 31 and 32 are to coated substrates comprising a substrate and a photoresist of Claims 1, 6, 18, 28, 29 or 30.

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In view of the foregoing, allowance of the above-referenced application is respectfully requested.

Respectfully submitted,



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